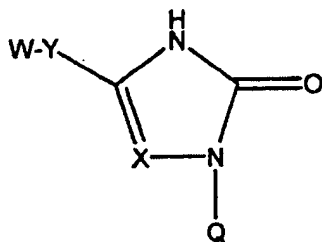


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (original): A compound having the structure



where X is CH or N,

Y is  $-\text{CO}-$ ,  $-\text{CONW}-$ ,  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{SO}-$ ,  $-\text{SO}_2-$ ,  $-\text{NWCO}-$ ,  $-\text{NW}-$ , or  $-\text{OCO}-$ ,

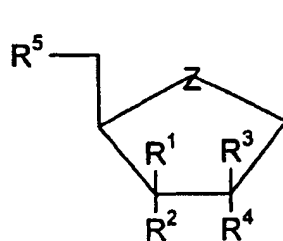
W is the same or different at different places in the molecule and each is H or alkyl or aryl or Rp or  $-\text{Ln}-\text{Rp}$ ,

Ln is a linker group,

Rp is a reporter moiety, and

Q is a sugar or a sugar analogue or a nucleic acid backbone or backbone analogue, provided that at least one reporter moiety Rp is present.

Claim 2 (original): The compound as claimed in claim 1, wherein Q is



where Z is O, S, Se, SO, NW or CH<sub>2</sub>,

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and each is H,

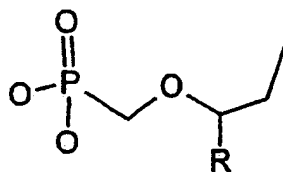
OH, F, NH<sub>2</sub>, N<sub>3</sub>, O-hydrocarbyl or Rp or -Ln-Rp,

R<sup>5</sup> is OH, SH or NH<sub>2</sub> or mono-, di- or tri-phosphate or -thiophosphate, or corresponding boranophosphate,

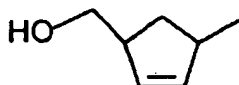
or one of R<sup>2</sup> and R<sup>5</sup> is a phosphoramidite or other group for incorporation in a polynucleotide chain, or a reporter moiety,

or Q consists of one of the following modified sugar structures

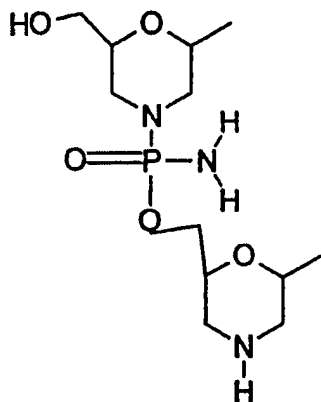
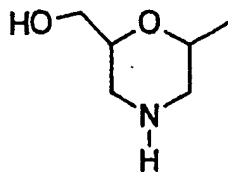
Acyclic Sugars



R= CH<sub>3</sub>,CH<sub>2</sub>OH, H,



Morpholino Backbone



Claim 3 (previously presented): The compound of claim 1, wherein a reporter moiety Rp is not present in Q.

Claim 4 (previously presented): The compound of claim 1, wherein the linker group Ln is a chain of 1 to 60 carbon, nitrogen, oxygen, phosphorus and/or sulphur atoms, rigid or flexible, saturated or unsaturated.

Claim 5 (previously presented): The compound of claim 1, wherein the reporter moiety Rp is a signal moiety or a solid surface or a reactive group by means of which a signal moiety or a solid surface may be linked to the nucleoside or nucleotide analogue.

Claim 6 (original): The compound of claim 5, wherein the reactive group is  $\text{NH}_2$ ,  $\text{OH}$ ,  $\text{COOH}$ ,  $\text{CONH}_2$ ,  $\text{ONH}_2$ ,  $\text{SH}$ , or a thiophosphate or a hydrazine or a hydrazide, or an active ester or aldehyde or maleimide.

Claim 7 (previously presented): A nucleoside analogue comprising a compound according to claim 1.

Claim 8 (previously presented): A nucleotide analogue comprising a compound according to claim 2.

Claim 9 (original): The nucleotide analogue of claim 8, wherein  $\text{R}^5$  is triphosphate.

Claim 10 (withdrawn): A polynucleotide chain comprising a nucleoside analogue of claim 7.

Claim 11 (withdrawn): The polynucleotide chain according to claim 10 wherein Q is a nucleic acid backbone consisting of sugar-phosphate repeats or modified sugar-phosphate repeats (LNA), or a backbone analogue such as peptide or polyamide nucleic acid (PNA).

Claim 12 (withdrawn): A chain extension method which comprises reacting the polynucleotide chain according to claim 10 with a primer in the presence of a polymerase.

Claim 13 (withdrawn): A chain extension method according to claim 12 in which the primer is chosen to hybridize with a section of the polynucleotide chain not including the nucleoside analogue.

Claim 14 (withdrawn): A method of detecting a nucleic acid which contains a compound according to claim 1, which method comprises the step of detecting the presence of the reporter moiety Rp.

Claim 15 (withdrawn): The method as claimed in claim 14 in which the reporter moiety is a radioisotope, a stable isotope, a signal moiety or a specific chemical moiety suitable for detecting by spectroscopy, especially mass spectroscopy.